WHAT IS CLAIMED IS:

1. In a system in which a boring tool is moved underground in a region during selective rotation of the boring tool, a method comprising the steps of:

configuring the boring tool with a transmitter for transmitting a locating signal for use in tracking an underground position of the boring tool in said region and for changing at least one characteristic of said locating signal responsive to subjecting the boring tool to a predetermined roll sequence during underground operation such that the predetermined roll sequence includes the steps of rotating the boring tool for one time period at a first roll rate in timed relation to rotating the boring tool for another time period at a second roll rate.

2. The method of claim 1 wherein said boring tool is rotated at said second roll rate immediately following rotating at said first roll rate without stopping rotation of the boring tool between the first and second roll rates.

3. The method of Claim 2 wherein said predetermined roll sequence includes the step of ceasing rotation of the boring tool for a predetermined interval prior to one of said first and second time periods.

4. The method of Claim 2 wherein said predetermined roll sequence includes the step of ceasing rotation of the boring tool immediately following said second time period for a predetermined interval.

5. The method of Claim 1 wherein said detecting step includes the steps of (i) determining a change in roll position over an interval of time during which the boring tool rotates, (ii) comparing the change in roll position to a threshold value and (iii) selecting an interval roll rate for that interval of time as one of the first roll rate and the second roll rate based on the comparison step.

6. The method of claim 1 wherein the first roll rate is a slow roll rate relative to the second roll rate.

7. In a system in which a boring tool is movable underground in a region during selective rotation of the boring tool using a drill string, a method comprising the steps of:

configuring the boring tool with a transmitter for transmitting a locating signal for use in tracking an underground position of the boring tool in said region and for changing at least one characteristic of said locating signal responsive to subjecting the boring tool to a predetermined roll sequence during underground operation, said characteristic being selected as at least one of frequency of the locating signal and transmitted power of the locating signal;

selectively rotating the boring tool using the drill string to subject the boring tool to the predetermined roll sequence, said predetermined roll sequence including the steps in the order of

for a first time interval, maintaining a non-roll status of the boring tool,

rolling the boring tool at a slow roll rate for a second, slow roll rate time interval,

rolling the boring tool at a fast roll rate for a third, fast roll rate time interval without stopping rotation following the slow roll rate time interval, and

for a fourth time interval, again maintaining the non-roll status of the boring tool.

8. The method of claim 7 wherein said first through fourth time rate intervals are of approximately equal time duration.

9. In a boring tool for use in a system in which the boring tool is moved underground in a region during selective rotation of the boring tool, an assembly comprising:

a first arrangement for transmitting a locating signal from the boring tool for use in tracking an underground position of the boring tool in said region; and

a second arrangement, cooperating with said first arrangement, for changing at least one characteristic of said locating signal responsive to subjecting the boring tool to a predetermined roll sequence during underground operation including rotation of the boring tool for one time interval at a first roll rate in timed relation to rotation of the boring tool for another time interval at a second roll rate.

10. The assembly of claim 9 wherein said roll detection arrangement is configured for detecting the second roll rate interval immediately following the first slow roll rate interval without stopping rotation of the boring tool between the first and second roll rate intervals as part of said predetermined roll sequence.

11. The assembly of Claim 9 wherein said roll detection arrangement is configured for detecting a non-roll interval immediately prior to one of said first and second roll rate intervals.

12. The assembly of Claim 9 wherein said roll detection arrangement is configured for detecting a non-roll interval immediately following one of said first and second roll rate intervals.

13. The assembly of Claim 9 wherein said roll detection arrangement is configured for (i) determining a change in roll position over an interval of time during which the boring tool rotates, (ii) comparing the change in roll position to a threshold value and (iii) selecting an interval roll rate for that interval of time as one of the first roll rate and the second roll rate based on the comparison step.

14. The assembly of claim 9 wherein the first roll rate is a slow roll rate relative to the second roll rate.